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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,873	01/17/2002	Tom Davisson	152/62692-RDK	7903 7
7590	11/19/2003			
EXAMINER				
MORILLO, JANEL A				
ART UNIT		PAPER NUMBER		
1742				

DATE MAILED: 11/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,873

Applicant(s)

DAVISSON ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-11 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. The corrected declaration filed on September 22, 2003 has been found proper.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Toma et al (US 4,511,632 A).

Toma teaches an example of an aluminum alloy suitable for fin material for tubes for a heat exchanger (abstract) comprising Mn, Si, Fe, Mg, and Cu in the below mentioned ranges (see Table), which falls within the presently claimed alloy composition. Toma recites that up to 0.5wt% Fe is present. Because Toma teaches a (narrow) range of Fe that overlaps the instant range of Fe “with sufficient specificity” (see MPEP 2131.03), and because Toma teaches an example with the presently claimed ranges of Mn, Si, Mg, and Cu, it is held that Toma anticipates the instant claims. Toma does teach the presence of Zr in said alloy. However, the presently claimed transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner asserts that the presence of Zr does not materially affect the

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basic and novel characteristic(s) of the claimed invention. Therefore, the rejection is deemed proper.

Concerning dependent claims 5 and 7, the Fe as well as Mn+Fe range taught by Toma significantly overlaps the presently claimed range. Therefore, the overlap is held to be “with sufficient specificity” (see MPEP 2131.03).

Concerning dependent claims 10 and 11, Toma teaches an aluminum alloy suitable for fin material for a heat exchanger (abstract).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sircar (US 5,976,278 A).

Sircar teaches an aluminum alloy as seen in the Table below (see Sircar at claim 1, etc), wherein said aluminum alloy is typically used as tubing, fin stock, or foil for packaging (column 7 lines 30-31). Sircar teaches no Mg is present in examples A-K in Table 1. Sircar does teach the presence of Ti in said alloy. However, the presently claimed transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner asserts that the presence of Ti does not materially affect the basic and novel characteristic(s) of the claimed invention.

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Sircar teaches that said Al-Mn-Fe-Si alloy exhibits improved combinations of corrosion resistance and hot formability (column 2 lines 49-52). Sircar teaches that Mg is believed to adversely impact certain brazing operations, and is optionally held to be preferably less than 0.1% (column 3 lines 24-26).

	Si	Fe	Mn	Cu	Mg	Zn	aluminum
instant claim 1	0.25-0.60	0.15-0.50	0.20-0.70	-0.05	-0.05		balance
2						0.1	
3						0.5-2.0	
4	0.3-0.5						
5		0.15-0.35					
6			0.30-0.60				
7		0.40-0.80 Mn+Fe					
Sircar	-0.5	-0.5	0.1-1.5	-0.03	-1	0.06-1	
Toma, ex. 2	0.26	up to 0.5	0.25	-	-	up to 0.02	balance
Toma broad	0.1-0.8	up to 0.5	0.1-0.5	-	-	-	balance

Because Sircar teaches a substantially overlapping alloy composition, complete with motivation to select the presently claimed narrow ranges of Cu and Mg, it is held that Sircar has created a prima facie case of obviousness of the presently claimed invention. Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05, *In re Best* 195 USPQ 430, *In re Malagari*, 182 USPQ 549, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir 1985), *In re Woodruff*, 16 USPQ 2d 1934, and *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Concerning dependent claims 2-7, Sircar teaches an overlapping alloy composition as seen in the Table above.

With regard to the process steps of product by process claims 8, 9, 21-23, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made,

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the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113, *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524) *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Because applicant has not shown that the product taught by the prior art is materially different from the presently claimed product by process, the rejection is deemed proper.

Concerning dependent claims 10 and 11, as stated above, Sircar teaches said aluminum alloy is typically used as tubing, fin stock, or foil for packaging (column 7 lines 30-31).

6. Claims 4, 6, 8, 9, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toma et al (US 4,511,632 A).

Concerning claims 4 and 6, Toma teaches an aluminum alloy suitable for fin material for tubes for a heat exchanger comprising Mn, Si, Fe, Mg, and Cu in the above mentioned ranges (see Table), which overlap the presently claimed alloying ranges. Because of the overlap, it is held that Toma has created a prima facie case of obviousness of the presently claimed invention. Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05.

With regard to the process steps of product by process claims 8, 9, 21-23, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113. Because

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applicant has not shown that the product taught by the prior art is materially different from the presently claimed product by process; the rejection is deemed proper.

Response to Arguments/Amendments

7. In the response filed on August 21, 2003 applicant amended the specification and claims 9 and 21-23. The claim objections have been overcome. Applicant's argument that the present invention is allowable over the prior art of record because Zr or Ti is expected to have a grain refining effect, and would add undesirable properties to the foil, has not been found persuasive. Applicant has not clearly shown specific evidence that the presence of Zr /Ti in the amounts taught by the prior art effects the basic and novel characteristics of the instant invention.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs- Morillo whose telephone number is (703) 308-4757. The examiner can normally be reached Monday through Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

jcm 

November 17, 2003